

FAYNSHTEYN, Semen Meyerovich; KOMAROVA, M.V., red.; BORUNOV, N.I., tekhn.  
red.

[Role of the state of the surface in the manufacture of semiconductor devices] Rol' sostoiانيا poverkhnosti v proizvodstve poluprovodnikovyykh priborov. Moskva, Gos. energ. izd-vo 1961. 109 p. (MIRA 14:10)  
(Semiconductors) (Transistors)

ABELEVICH, L.A.; YEFREMOV, V.V., prof., doktor tekhn. nauk, red.;  
KOMAROVA, M.V., red.; TUPITSYNA, L.A., red. izd-va;  
YASHUKOVA, N.V., tekhn. red.

[Running-in and testing motor-vehicle units in overhauling]  
Prirabotka i ispytanie agregatov avtomobilei pri kapital'-  
nom remonte. Pod red. V.V.Efremova. Rosvuzizdat, 1963. 42 p.  
(MIRA 16:12)

(Motor vehicles—Maintenance and repair)

KOMAROVA, M. Z.

Devonian sediments in the At-Bashi Range. Inform.sbor.VSEGEI  
no.46:71-78 '61. (MIRA 15:3)  
(At-Bashi Range--Geology, Stratigraphic)

KOMAROVA, N.

Some observations of lexicologic usage in the prose works of  
M. IU. Lermontov; words, expressing conceptions of the inner world.  
Vestis Latv ak no.4:39-48 '61. (EEAI 10:9)

(Lermontov, Mikhail Iurevich)  
(Russian fiction—History & criticism)

KOSSOVA, V.P.; KOMAROVA, N.

Changes in the strength of fluxed sinter in relation to the mineralogical composition and microstructure. Izv.vys.ucheb. zav.; chern. met. 8 no.4:59-64 '65. (MIRA 18:4)

1. Kamyshturunskiy zhelezorudnyy kombinat.

KOMAROVA, N.

Some observations on the vocabulary used by M. IU. Lermontov  
in his prose works; words designating concepts of the inner  
world. Izv. AN Latv. SSR no. 4:39-48 '61.

(MIRA 16:1)

(Lermontov, Mikhail IU 1814-1841)  
(Russian language—Style)

DZHAFARIDZE, P.N.(Tbilisi); KOMAROVA, N.A.(Tbilisi)

Criteria for the development of optimum heating conditions for  
a new coking procedure. Izv. AN SSSR. Otd. tekhn. nauk. Met. i  
topl. no.5:227-233 S-O '60. (MIRA 13:11)  
(Coke ovens)

KAURICHEV, I.S.; KOMAROVA, N.A.; SKRYNNIKOVA, I.N.; SHILOVA, Ye.I.

Methods for studying the chemical composition of the liquid  
phase of soil (soil solution). Pochvovedenie no.6:35-47 Je '63.  
(MIRA 16:7)

(Soils--Analysis)



15

Volu metric determination of humus in soils. N. A. Kozlovskii. *Proc. Leningrad Dept. Inst. Fert.* 17, 20-21 (1933).—(1) Humus is oxidized by 0.4 N  $\text{CrO}_3$  in dil.  $\text{H}_2\text{SO}_4$  (1:1) with  $\text{K}_2\text{SO}_4$  as catalyst, the mixt. being kept at  $140-150^\circ$  for 5 min. After cooling, diln. and addn. of  $\text{H}_2\text{PO}_4$ , the soln. is titrated with standard  $\text{Fe}(\text{NH}_4)_2(\text{SO}_4)_2$  using  $\text{H}_2\text{SO}_4$ .  $\text{NH}_4\text{PO}_4$  being used as indicator. Modifications of the method for the detn. of humus in aq., aq.- $\text{NH}_4$  and alkali exts. are given. The results agree well with those obtained by Knop's method. B. C. A.

*C6*

A study of soil solutions. N. A. Komarnykh. Pedology  
(U. S. S. R.) 1950, No. 10, 81-84. Soil and sand is mixed  
in the ratio of 1:0.5 to 1:2 and the mixt., 300 g., is used in  
tubes, 1.5 meters long and 1.5 to 3.0 cm. inside diam. Ak  
is used as the agent that takes in the soil soln.  
I. S. Joffe

ASAC-SLA METALLURGICAL LITERATURE CLASSIFICATION

KOMAROVA, N. A.

"Displacement of Soil Solutions by Substituting Liquids and the Utilization of a Method in Soil Investigation." Cand Geol-Min Sci, Soil Inst, Acad Sci USSR, 3 Mar 54.  
Dissertation (Vechernyaya Moskva Moscow, 22 Feb 54)

SO: SUM 186 19 Aug 1954

KOMAROVA, N. A.

USSR/Miscellaneous - Soil science

Card 1/1 Pub. 22 - 34/45

Authors : Kryukov, P. A., and Komarova, N. A.

Title : Pressing out of water from clays at ultra-high pressures

Periodical : Dok. AN SSSR 99/4, 617-619, Dec 1, 1954

Abstract : The phenomena connected with the separation of water from clays and some other gels were investigated to establish the composition of solutions which saturate the soil or its deposits. Results obtained are described. Seven USSR references (1933-1952). Graph; drawing.

Institution : ...

Presented by: Academician I. V. Tyurin, June 21, 1954

KOMAROVA, N. A.

USSR/Cosmochemistry - Geochemistry. Hydrochemistry

D.

Abs Jour : Referat Zhur - Khimiya, No 2, 1957, 4208

Author : Komarova, N. A.

Title : Displacement of Solutions from the Soil by the Method of Liquid Substitution

Orig Pub : Gidrokhim. materialy, 1955, 24, 56-59

Abstract : An investigation was carried out of the capacity of various liquids to displace solutions from sand, silica gel and the soil. Best displacing agents, suitable for use with different materials, were found to be dioxane and ethyl alcohol, the next best being methyl alcohol, acetone and water. It is recommended to carry out the displacement of solutions in long narrow tubes 1-1.5 m high, with an internal diameter of 1.5-4 cm. Addition to the soil and ground specimens of washed quartz sand accelerates the process of displacement of the solution.

Card 1/1 *Soil Incl. in V.V. Dokuchayev AS USSR*  
- 87 -

APPROVED FOR RELEASE: 06/13/2000

CIA-RDP86-00513R000824110009-6"

Abs Jour : Ref Zhur- Biol., No 7, 1958, No 31202

Author : Komarova N. A.

Inst : Not Given

Title : Innervation of Skin and Its Derivatives.

Orig Pub : V. sb.: Probl. morfol. nervn. sistemy, L., Medgiz, 1956, 108-111

Abstract : Sections of skin were studied of nasal-labial speculum of horned cattle, human fingers, ears, eyelids and lips and noses of healthy cats and cats with a sympathetic ganglion of the upper neck removed and with 2 and 3 spinal ganglia of the neck removed. Nerve endings were found in all parts of the skin, in all of its derivatives, in all vessels of the skin, including the arterio-vein anastomoses. Ending in the arterio-vein anastomoses have a type of end-plate in the muscles of the hairs - a type of thin-bowdhy bush, in the cells of the sebaceous glands - a type of small rings and reticular

Card : 1/2

KOMAROVA, N. A.

USSR/Soil Science. - Physical and Chemical Properties of Soils.

No 2, 1958, 5746

J-2

5(

SOV/69-21-2-11/22

AUTHORS: Komarova, N.A. and Kryukov, P.A.

TITLE: The Determination of the Activity of Sodium Ions in Disperse Systems (Opredeleniye aktivnosti ionov natriya v dispersnykh sistemakh)

PERIODICAL: Kolloidnyy zhurnal, 1959, Nr 2, pp 189-194 (USSR)

ABSTRACT: The authors report on an investigation of the behaviour of aluminium silicate and boron silicate glass electrodes in sodium salt solutions carried out to clarify the conditions of their use for the determination of the activity of sodium ions. The capability of such electrodes to react not only on hydrogen but also on sodium ions was recently established by the works of M.M. Shul'ts and other scientists. For their experiments the authors used glass electrodes with a varying content of  $\text{Na}_2\text{O}$ ,  $\text{B}_2\text{O}_3$ ,  $\text{Al}_2\text{O}_3$  and  $\text{SiO}_2$ . It was ascertained that they react on sodium ions, and that they can be used for the determination of the activity of these ions in soil solutions, soil suspensions and wet soil. The investigation was carried out under the guidance of I.N. Anti-

Card 1/2

SOV/69-21-2-11/22

The Determination of the Activity of Sodium Ions in Disperse Systems

pov-Karatayev. There are 7 tables and 8 Soviet references.

ASSOCIATION: Pochvennyy institut AN SSSR im. V.V. Dokuchayeva, Moskva  
(Soil Institute of the AS USSR imeni V.V. Dokuchayev, Moscow)

SUBMITTED: January 16, 1959

Card 2/2

HUBTSOV, M.V.; MIKHLINA, Ye.Ye.; VOROB'YEVA, V. Ya.; KOMAROVA, N.A.

Synthesis of 2,5,8-trisubstituted quinuclidine. Zhur. ob.  
khim. 34 no.7:2218-2221 J1 '64 (MIRA 17:8)

1. Vsesoyuznyy nauchno-issledovatel'skiy khimiko-farmatsevticheskiy institut imeni S. Ordzhonikidze.



ACC NR: AP6029082

SOURCE CODE: UR/0413/66/000/014/0156/0156

INVENTOR: Rubtsov, M. V.; Mikhlin, Ye. Ye.; Vorob'yeva, V. Ya.; Lobanov, D. I.; Komarova, N. A.

ORG: none

TITLE: Preparation of 1-carbethoxymethyl-4-carbethoxypiperidine. Class 12, No. 149106

SOURCE: Izobret prom obraz tov zn, no. 14, 1966, 156

TOPIC TAGS: ~~carbethoxymethyl-4-carbethoxypiperidine synthesis~~, ethyl isonipelate alkylation, chloroacetic acid ester, *ALKYLATION, CARBON COMPOUND*

ABSTRACT: To increase the yield and to simplify the preparation of the title compound by alkylation of ethyl isonipelate (I) with ethyl chloroacetate, the hydrochloride of I is alkylated in anhydrous ethanol in the presence of  $\text{Na}_2\text{CO}_3$ . [WA-50; CBE No. 11]

SUB CODE: 07/ SUBM DATE: 05Sep61

Card 1/1

ACC APPROVED FOR RELEASE: 06/13/2000 SOURCE CODE: UR/0413/66/000/014/0156/0156 CIA-RDP86-00513R000824110009-6"

INVENTOR: Rubtsov, M. V.; Mikhlin, Ye. Ye.; Vorob'yeva, V. Ya.; Lobanov, D. I.; Komarova, N. A.

ORG: none

TITLE: Preparation of 1-carbethoxymethyl-4-carbethoxypiperidine. Class 12, No. 149106

SOURCE: Izobret prom obraz tov zn, no. 14, 1966, 156

TOPIC TAGS: ~~carbethoxymethyl-4-carbethoxypiperidine synthesis~~, ethyl isonipelate alkylation, chloroacetic acid ester, *ALKYLATION, CARBON COMPOUND*

ABSTRACT: To increase the yield and to simplify the preparation of the title compound by alkylation of ethyl isonipelate (I) with ethyl chloroacetate, the hydrochloride of I is alkylated in anhydrous ethanol in the presence of  $\text{Na}_2\text{CO}_3$ . [WA-50; CBE No. 11]

SUB CODE: 07/ SUBM DATE: 05Sep61

Card 1/1

KOMAROVA, N.G.

History of the development of the cartographic representation  
of the Caspian Sea. Vest. Mosk. un. Ser. 5: Geog. 20 no.1:69-72  
Ja-F '65. (MIRA 18:3)

KOMAROVA, N.G.

Story of the research of the Caspian Sea and its level in the Middle Ages. Izv. AN Turk. SSR. Ser. biol. nauk no.2:86-89 '65.  
(MIRA 18:5)

1. Moskovskiy gosudarstvennyy universitet imeni Lomonosova.

KOMAROVA, N.G.

The present-day state of the Caspian Sea level problem.  
Vest. Mosk. un. Ser. 5:Geog. 18 no.5:83-84 8-0 '63.  
(MIRA 16:11)

KOMAROVA, N.G.

From the history of the geographical study of the Caspian Sea;  
a forgotten expedition of I.V.Tokmachev. Izv. AN SSSR Ser.  
geog. no.6:98-106 N-D '64 (MIRA 18:1)

1. Moskovskiy gosudarstvennyy universitet imeni M.V.Lomonosova.

KOMAROVA, N.G.

Main problems of the natural and historical study of the Caspian Sea in the 18th and the first half of the 19th century using archive materials. Vest. Mosk. un. Ser.5: Geog. 19 no.5:49-55 S-0 '64.  
(MIRA 18:1)

1. Kafedra istorii geografii Moskovskogo universiteta.

YATSKIKH, V.G.; KOMAROVA, N.I.; AFONINA, G., vedushchiy redaktor; YAKUBYUK, N.,  
tekhnicheskiy redaktor

[Work experience with the "Gorniak" cutter-loader] Opyt raboty na  
kombaine "Gorniak." Kiev, Gos. izd-vo tekhn. lit-ry USSR, 1956.  
18 p. (MIRA 10:1)  
(Coal mining machinery)

YATSKIKH, V.G.; KOMAROVA, N.I.; APOHINA, G., vedushchiy redaktor; YAKUBYUK, N.,  
tekhnicheskii redaktor

[Work practices with UKT-1 and "Shakhter" cutter-loaders] Opyt  
raboty na kombainakh UKT-1 i "Shakhter." Kiev, Gos. izd-vo tekhn.  
lit-ry USSR, 1956. 27 p. (MLR# 10:1)  
(Coal mining machinery)



YATSKIN, V.G.; KIMAROVA, N.I.; AFONINA, G., vedushchiy redaktor; YAKUBYUK, N.,  
tekhnicheskiiy redaktor

[Work with UMG-47 and UMG-2a cutter-loaders] Opyt raboty na  
kombainakh UMG-47 i UMG-2a. Kiev, Gos. izd-vo tekhn. lit-ry  
USSR, 1956. 31 p. (MIRA 10:1)  
(Coal mining machinery)

YATSKIKH, V.G.; KOMAROVA, N.I.; AFONINA, G., vedushchiy redaktor; YAKUBYUK, N.  
tekhnicheskiiy redaktor

[Work with the "Donbass" cutter-loader] Opyt raboty na kombaine  
"Donbass." Kiev, Gos. izd-vo tekhn. lit-ry USSR, 1956. 34 p.  
(Coal mining machinery) (MLR 10:1)

LUKOSHINA L.A.; KOMAROVA, N.I.; MEDVEDEVA, E.P.

Utilization of the M-6 and K-6 short-fibrous asbestos in the  
production of asbestos-cement products. Trudy NIIAsbesttsementa  
no.19:96-119 '65.  
(MIRA 18:9)

KOMAROVA, N.I.

Results of the study of 100 patients with secondary defects of the interauricular septum. Uch. trudy GMI no.19:145-149 '65.

(MIRA 18:8)

1. Iz kliniki gosital'noy khirurgii Gor'kovskogo gosudarstvennogo meditsinskogo instituta imeni S.M.Kirova.

DYNNIK, I.B.; KOMAROVA, N.I.

Importance of electrokymographic examination in the diagnosis of  
congenital heart defects. Uch. trudy GMI no.19:150-156 '65.

1. Iz kliniki gosital'noy khirurgii Gor'kovskogo gosudarstvennogo  
meditsinskogo instituta imeni S.M.Kirova. (MIRA 18:3)

ZHIL'TSOV, Yu.K.; SAPRYKIN, F.Ya.; KOMAROVA, N.I.

Mode of the occurrence of uranium in Jurassic sandstones  
and the weathering surface of Archean granitoids lying  
beneath them. Sov.geol. 8 no.11 61-70 N '65.

(MIRA 1961)

LOKTIONOVA, N.A.; RASTVOROVA, N.M.; KOVRIZHNYKH, V.G.; KOMAROVA, N.K.;  
TELIS, M.Ya.; DOBATKIN, V.I., rukovoditel' raboty; PRINIMAY  
uchastiye: VINOKUROV, N.G.; PONAGAYBO, Yu.N.; PERETYKINA, I.N.;  
BULGAKOV, G.F.; PYATUNINA, V.I.; TITKOV, S.M.; KALMYKOV, K.V.;  
BRASLAVSKIY, D.N.; VEYSMAN, S.Ya.; APER'YANOVA, N.N.;  
PANTYUSHKOVA, N.S.; PRIVEZENTSEVA, T.V.

Ways to reduce warping of large-size parts made of the  
AK4-1 alloy. Alium. splavy no.3:271-284 '64.

(MIRA 17:6)

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S/081/61/000/020/058/089  
B102/B147

AUTHORS:

Andronov, G. G., Komarova, N. K.

TITLE:

Purification of a reactor circuit from corrosion products

PERIODICAL:

Referativnyy zhurnal. Khimiya, no. 20, 1961, 263, abstract  
20I189 (Sb. "Korroziya reaktorn. materialov". M., Atomizdat,  
1960, 277 - 282)

TEXT:

A solution is recommended for washing the circuit of a BSA-C (VVR-S) reactor made of Al alloy, which has the following composition:  $\text{CrO}_3$  20g/Liter,  $\text{H}_3\text{PO}_4$  35 milliliters/liter (specif. weight 1.68); temperature  $\sim 20^\circ\text{C}$ ; duration of treatment: until corrosion products are completely dissolved. The etching solution is removed from the whole reactor (tank and circuit) by repeated and careful washing with distilled water. Washing with 8%  $\text{HNO}_3$  solution is not recommended because intercrystalline corrosion might occur in the junction zone. [Abstracter's note: Complete translation.]

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KOMAROVA, N.K.

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PHASE I BOOK EXPLOITATION

SOV/5256

Gerasimov, Valentin Vladimirovich, ed., Candidate of Chemical Sciences.

Korroziya reaktornykh materialov; sbornik statey (Corrosion of Nuclear-Reactor Materials; a Collection of Articles) Moscow, Atomizdat, 1960. 284 p. 3,700 copies printed.

Ed.: A.I. Zavodchikova; Tech. Ed.: Ye.I. Mazel'.

**PURPOSE:** This collection of articles is intended for mechanical and metallurgical engineers as well as for scientific research workers concerned with the construction of nuclear reactors.

**COVERAGE:** The water corrosion of various types of stainless steel and alloys under high pressures and temperatures is investigated from the point of view of the use of these materials for the construction of nuclear reactors. Attention is given to the following: the use of oxygen for protecting steel against corrosion, the behavior of steel in high-temperature

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**Corrosion of Nuclear- (Cont.)**

SOV/5256

water with various compositions, factors of metal stress corrosion, intergranular corrosion, the mechanism of corrosion cracking, and the corrosion resistance of aluminum and zirconium alloys. Conclusions based on test results are included. No personalities are mentioned. Most of the articles are accompanied by references. Of 238 references 87 are Soviet.

**TABLE OF CONTENTS:**

Foreword

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**PART I. METHODS OF INVESTIGATING WATER  
AND ELECTROCHEMICAL CORROSION AT  
HIGH TEMPERATURES AND PRESSURES**

5

Gulyayev, V.N., and P.A. Akol'zin. Methods of Testing the Corrosion-Creep Strength of Metals at High Pressures and Temperatures  
Card 2/4

Corrosion of Nuclear- (Cont.)

SOV/5256

Investigating the Mechanism of High-Purity Water Corrosion of Zirconium Alloys With Niobium

250

Tolstaya, M.A., G.N. Gradusov, and S.V. Bogatyreva. Investigating Water Corrosion Resistance of Zirconium Alloy Tubes at High Temperatures

264

Gerasimov, V.V., and V.N. Aleksandrova. Investigating the Electrochemical Behavior of Zirconium

274

Andronov, G.G., and N.K. Komarova. Removing Corrosion Products From the Heat Exchanger of a Reactor

277

AVAILABLE: Library of Congress (TA482.G4)

Card 8/8

VK/wrc/bc  
10-12-61

KHOL'NOVA. V.I.; KOVRIZHNYKH, V.G.; YELAGINA, Z.A.; Prinsipali uchastiye:  
VINOKUROV, N.D.; ANDRIANOV, F.F.; ZAL'TSMAN, I.Ya.; VOLKOV,  
Ye.S.; VASILEVSKAYA, M.A.; KOMAROVA, N.K.

Investigating large-size forgings made of the B93 alloy.

Alium. splavy no.3:136-144 '64.

(MIRA 17:6)

NIKOLAYEV, Yevgeniy Vladimirovich; BOYNOVICH, D.I., inzh.,  
retsenzent; KUZNETSOV, M.V., inzh., retsenzent; OSMINKIN,  
Ya.M., nauchn. red.; KOMAROVA, N.K., red.

[Safety measures on shipyard sidings] Tekhnika bezopasnosti  
na pod"ezdnykh putiakh sudostroitel'nykh predpriatii. Le-  
ningrad, Sudostroenie, 1965. 54 p. (MIRA 18:3)

ACCESSION NR: AT4037668

S/2981/64/000/003/0271/0284

AUTHOR: Loktionova, N. A.; Rastvorova, N. M.; Kovrizhny\*kh, V. G.; Komarova, N. K.; Telis, M. Ya.

TITLE: Ways to reduce warping of large parts made of alloy AK4-1

SOURCE: Alyuminiyevy\*ye splavy\*, no. 3, 1964. Deformiruyemy\*ye splavy\* (Malleable alloys), 271-284

TOPIC TAGS: alloy AK4-1, extruded hollow cylinder, hollow cylinder warping, cooling stress, warping, alloy heat treatment, boiling water quenching, alloy mechanical property, aluminum alloy

ABSTRACT: The authors report on a study designed to eliminate residual cooling stresses, which result in a rejection rate of up to 50% due to warping in machining. Inversely extruded and pierced hollow cylinders (wall thickness 32.5-50.5 mm, outside diameter 591-855 mm, height 156-823 mm, weight 37 to 180 kg), manufactured in serial production from homogenized ingots of alloy AK4-1, were hardened (45 min. in a niter bath at  $528 \pm 5^\circ\text{C}$ , quenched 2 min. in lukewarm or 5 min. in boiling water) and aged 10 hrs. at  $190^\circ\text{C}$ , then tested to determine effects of quenching in boiling water on mechanical properties, microstructure and warping. Effects of aging temperature were evaluated in a separate series, where the latter was varied

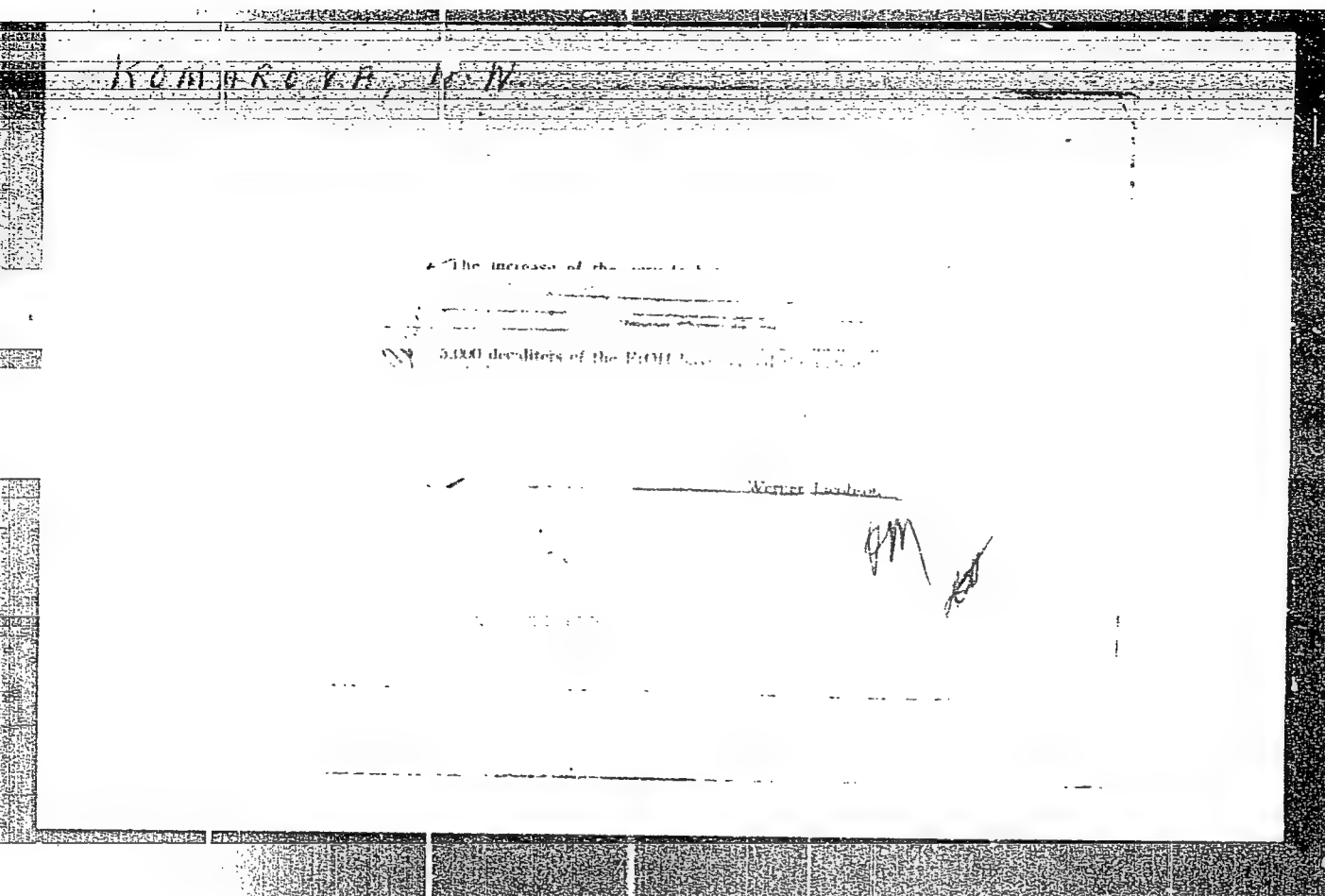
Card 1/2

KRASOVSKIY, I.V.; SHTEYNGART, M.V.; KOMAROVA, N.M.

Analysis of binary liquid medicinal mixtures of non-electrolytes  
by the method of surface tension. Apt. delo 10 no.3:34-39 My-Je  
'61. (MIRA 14:7)

1. Kafedra fizicheskoy khimii Khar'kovskogo farmatsevticheskogo  
instituta.

(SOLUTIONS (PHARMACY))





S'POLYARSKIY, Lev I'vovich, Prinimal uchastiye GLOZMAN, M.K.,  
kand. tekhn. nauk; ADLERSHTEYN, I.TS., inzh., retsenzent;  
FINKEL', G.N., inzh., retsenzent; RIMMER, A.I., inzh.,  
nauchn. red.; KOMAROVA, N.P., red.

[Verifying operations in the finishing stages of shipbuilding and in ship repair] Proverochnye raboty pri dostroike i remonte sudov. Leningrad, Sudostroenie, 1965. 159 p.  
(MIRA 18:8)

SIDOROCHKIN, S.S.; OSMINKIN, Ya.M.; CHURIN, V.N.; YUSHTIN, Ye.I.;  
YANKOVSKAYA, Z.V.; POKROVSKIY, M.N., otv. red.; PENOVA,  
Ye.M., red.; SOSIPATROV, O.A., red.; KOMAROVA, N.P., red.

[Handbook on safety engineering and industrial sanitation in  
three volumes] Spravochnik po tekhnike bezopasnosti i proiz-  
vodstvennoi sanitarii v trekh tomakh. Leningrad, Sudostroenie.  
Vol.2. 1965. 679 p. (MIRA 18:10)

1. Russia (1923- U.S.S.R.) Laws, statutes, etc.

KOPEL'MAN-SERPUKHOVA, Z.I., inzh.; ARDENTOV, V.V., kand.tekhn.nauk;  
KOMAROVA, N.P.

Welding rod for the automatic deposition of an anticorrosive coating  
on vessels for work aggressive media. Svarka 2:77-83 '59.

(Welding rods) (Corrosion and anticorrosives) (MIRA 14:5)

KOPIL'MAN-SERPUKHOVA, Z.I., ARDENTOV, V.V., kand.tekhn.nauk,  
KOMAROVA, N.P.

New composition of a welding chromium-nickel-niobium austen-  
itic wire. Svar. proizv. no.2:27-29 F '60. (MIRA 13:6)  
(Electric welding) (Metal cladding)

POSTNIKOV, I.S.; KHARITONOV, D.F.; KOMAROVA, N.P.; BELYAYEVA, M.A.

Purification of city waste water in high biofilters. Nauch.  
trudy AKKH no.20:23-39 '63. (MIRA 18:12)

VODOP'YANOV, K.A. [deceased]; KOROBOV, A.I.; KOMAROVA, N.V.

Choice of experimental conditions for producing dielectric films  
by way of deposition from the gaseous phase. Izv. vys. ucheb.  
zav.; fiz. no.1:49-54 '64. (MIRA 17:3)

1. Issledovatel'skiy fiziko-tekhnicheskiy institut pri Gor'kovskom  
gosudarstvennom universitete imeni N.I.Lobachevskogo.

gas phase

is compared to a simplified method of feeding the working gas to the deposit substrate, taking special care to keep the substrate smooth and uniform in temperature and ventilating the reaction products. The two methods are different.

The dependence noticed on the type of substrate material used is attributed to



KOMAROVA, N.Ye.; KOSSOVA, V.P.

Microhardness of minerals in Kerch peninsula sinter. Met. i  
gornorud. prom. no.6:56-57 M-D '64.

(MIRA 18:3)

KOSSOVA, V.P.; KOMAROVA, N.Ye.

Changes in the mineralogical composition of K<sub>2</sub>O sinters  
depending on its basicity. Stal' 23 no.6:491-493 Je '63.  
(MIRA 16:10)

1. Tsentral'naya nauchno-issledovatel'skaya laboratoriya Kamysh-  
Burunskogo zhelezorudnogo kombinata.

KOMAROVA, O.I.

Effect of roentgen rays on blood morphology in rabbits following  
loss of the blood. Dokl. AN SSSR 96 no.5:1069-1071 Jo '54.

(MLRA 7:7)

1. Sverdlovskiy sel'skokhoziaystvennyy institut. Predstavleno  
akademikom A.I.Abrikosovym.

(HEMORRHAGE, experimental,

eff. of x-rays on blood morphol. in post-hemorrh. anemia)

(ROENTGEN RAYS, effect.

on blood morphol. in post-hemorrh. anemia in rabbits)

(BLOOD, effect of radiations on,

x-rays, in post-hemorrh. anemia in rabbits)

KOMAROVA, O.I.

"Changes in the Morphological Composition of the Blood of Rabbits Under the Influence of Beta Radiation Under Conditions of Blood Loss," by O. I. Komarova, Chair of Normal and Pathologic Physiology, Sverdlovsk Agricultural Institute; and Laboratory of Radiobiology, Sverdlovsk Institute of Labor Hygiene and Occupational Pathology, Meditinskaya Radiologiya, Vol 1, No 6, Nov/Dec 56, pp 21-24

The action of soft and hard beta radiation under conditions of blood loss resulted in no essential changes from the standpoint of the morphological composition of the blood.

The absence of significant shifts in the morphological composition of the blood on direct action of beta rays on the higher nervous centers leads to the assumption that humoral factors, along with other factors, play an essential role in hemopoietic changes in radiation sickness. (U)

Scim, 1312

KOMAROVA, O.I.

Therapeutic effect of sapropel. Veterinariia 33 no.9:46-47 S '56.  
(MLRA 9:10)

1.Sverdlevskiy sel'skokhozyaystvennyy institut.  
(Barths, Medical and surgical uses of)

USSR / General Problems of Pathology. Inflammatory  
Processes.

U

Abs Jour : Ref Zhur - Biol., No 10, 1958, No 46670

Author : ~~Komarova, O. I.~~

Inst : Sverdlovsk Farm Institute.

Title : Experimental Data on the Effect of Moltayev Sapropel  
upon Inflammatory Processes in Dogs.

Orig Pub : Tr. Sverdl. s.-kh. in-ta, 1957, 1, 225-229.

Abstract : In dogs, inflammation (In) was produced by subcutaneous  
injection of 2-3 ml of turpentine or by an unsterile cut.  
Then, warmed Moltayev sapropel (I) was inflicted upon the  
skin 4-12 times for 30 minutes. In control dogs, (I) did  
not cause changes of phagocytic activity (PhAL), nor did  
it modify the number of leukocytes (NL) and the leukocytes  
(NL) and the leukocytic formula. At the presence of (I),

Card 1/2

USSR / General Problems of Pathology. Inflammatory Processes.

U

Abs Jour : Ref Zhur - Biol., No 10, 1958, No 46671

Author : Komarova, O.I.

Inst : Not given

Title : The Dynamics of the Leshchinskiy-Kavetskiy Skin Test by Applying Moltayev Sapropel upon the Surrounding Area of an Inflammatory Process in Rabbits.

Orig Pub : Tr. Sverd. s.-kh. in-ta, 1957, 1, 235-237

Abstract : Inflammation (In) was produced in rabbits by suturing a fecal matter ball under the skin. Then, sapropel which has been warmed to 40° C was applied directly to the area of In. The Leshchinskiy-Kavetskiy test with tripanic blue (I) was performed in the skin above the In focus. The limited size of the (I) spot on the inflamed skin spoke for the decreased permeability of the tissue at the

Card 1/2

Card : 1/1

KOMAROVA, O., S.,

Pa. 150T11

USSR/Biology - Insects  
Botany

1 Oct 49

"Causes of Diapause in Racemose Leaf Rollers  
(Polychrosis Botrana Schiff)," O. S. Komarova,  
Leningrad State U Imeni A. A. Zhdanov, 4 pp

"Dok Akad Nauk SSSR" Vol LXVII, No 4

Conducted observations in Kirovabad and Khanlar,  
about 8 km from Kirovabad. Gives tables of  
average temperatures during period of develop-  
ment of caterpillar, percentages of diapause  
cocoon per generation, and the effect of diets  
in 1947-1948. Diagram of phenological periods

150T11

USSR/Biology - Insects (Contd)

1 Oct 49

Shows that light and temperature are important  
factors in regulating diapause. Submitted by  
Ye. N. Pavlovsky 25 Jul 49.

150T11



KOMAROVA, O.S.

Life cycle and conditions of the development of the eudemis  
moth (*Polychrosis botrana* Schiff.). Zool.shur.33 no.1:102-113  
Ja-F '54. (MLRA 7:2)

1. Kafedra entomologii Leningradskogo gosudarstvennogo universi-  
teta i Vsesoyuznyy institut zashchity rasteniy.  
(Grapes--Diseases and pests) (Eudemis)

KOMAROVA, O.S.

Developmental cycle of the acorn weevil (*Curculio glandium* Marsh.)  
in oak forests of Belgorod Province. Uch. zap. LGU no.240:77-87  
'58. (MIRA 11:9)  
(Belgorod Province--Weevils) (Oak--Diseases and pests)

KOMAROVA, O.S.

Formation of the hibernating stock and the diapause of bollworm  
pupae [with summary in English]. Ent. oboz. 38 no.2:352-360 '59.  
(MIRA 12:7)

1. Vsesoyuznyy institut zashchity rasteniy, Leningrad.  
(Azerbaijan--Bollworm) (Ukraine--Bollworm)  
(Insects--Development)

KOMAROVA, O.S.

[Grape varieties of the Ukraine] Sorty vynuhradny Ukrainy.  
Kyiv, Derzh.vyd-vo sil's'kohospodars'koi lit-ry URSR, 1961. 113 p.  
(Ukraine--Viticulture) (Grapes--Varieties) (MIRA 15:8)

KOMAROVA, O.S.

Forecasting the abundance of the first generation of the cotton bollworm. Vop. ekol. 7:84-85 '62. (MIRA 16:5)

1. Vsesoyunnyy institut zashchity rasteniy, Leningrad.  
(Azerbaijan--Bollworm)

KOMAROVA, O.S.

Temperature effect on the hibernation of bollworm pupae.  
Zool. zhur. 43 no.10:1467-1472 '64. (MIRA 17:12)

1. All-Union Research Institute of Plant Protection (Leningrad).

KOMAROVA, O.V.

Stratigraphy of middle Miocene sediments in the southwestern part  
of the Ukrainian S.S.R. Nauk.sop.Kyiv.un. 16 no.14:87-99  
'57. (MIRA 13:4)

(Ukraine--Geology, Stratigraphic)

KOMAROVA, O.V.

Changeability of the mussel *Lucina (Linga) columbella* Lam. from  
Tortonian sediments in the Dniester Valley. Visnyk Kyiv.un.Ser.  
geol.ta geog. no.1:47-54 '58. (MIRA 12:10)  
(Dniester Valley--Mussels, Fossil)



KOMAROVA, O. V.

Cand Geol-Min Sci - (diss) "Stratigraphy and fauna of mollusks of the Middle Miocene deposits of the Southwestern part of the Ukrainian SSR and Moldavian SSR." Kiev, 1961. 15 pp; 1 page of tables; (Ministry of Higher and Secondary Specialist Education Ukrainian SSR, Kiev Order of Lenin State Univ imeni T. G. Shevchenko); 180 copies; price not given; (KL, 5-61 sup, 179)

BAUMAN, A.V.; KOMAROVA, P.A.; DOLZHENKOV, Yu.N.; KUSHCHANOV, G.K.;  
BRENNER, V.A.; IM, A.I.; KAZAKOV, V.M.; KOZHAKHANOV, S.;  
MURATOV, B.A.

Self-propelled drilling rig. Gor. zhur. no.7:75 J1 '63.  
(MIRA 16:8)

DVERNITSKIY, P.M.; SOKOLOV, N.V.; ALEKSISHVILI, T.I.; PROROKOV, N.I.;  
KOMAROVA, P.I.; NOVICHKOV, I.A.; MEDVEDEV, I.F.

Strides of the "big" chemistry. Tekst. prom. 24 no.4:1-9 Ap '64.  
(MIRA 17:6)

1. Predsedatel' Vladimirovskogo oblastnogo pravleniya Nauchno-tekhnicheskogo obshchestva legkoy promyshlennosti (for Dvernitskiy)
2. Uchenyy sekretar' Gruzinskogo respublikanskogo pravleniya Nauchno-tekhnicheskogo obshchestva legkoy promyshlennosti (for Aleksishvili).
3. Predsedatel' Kostromskogo oblastnogo pravleniya Nauchno-tekhnicheskogo obshchestva legkoy promyshlennosti (for Sokolov).
4. Direktor Ivanovskogo khlopchatobumazhnogo kombinata im. Samoylova (for Prorokov).
5. Predsedatel' Kalininskogo oblastnogo komiteta professional'nogo soyuza rabotnikov tekstil'noy i legkoy promyshlennosti (for Komarova).
6. Direktor Korablinskogo kombinata shelkovykh tkaney iz shtapel'nogo volokna (for Novichkov).
7. Direktor Vsesoyuznogo nauchno-issledovatel'skogo instituta torfyanoy promyshlennosti (for Medvedev).

KOMAROVA, R. F.

USSR/Physics - Semi-conductors

Card 1/1 Pub. 22 - 19/47

Authors : Bredov, M. M.; Komarova, R. F.; and Regel', A. R.

Title : Study of the change in the rectifying properties of metal-semi-conductor systems of point-contact couplings which take place due to irradiation of the semi-conductors by ions of alkali metals

Periodical : Dok. AN SSSR 99/1, 69-72, Nov 1, 1954

Abstract : Experiments with metal-semi-conductor systems of point-contact couplings are described. The experiments are intended to establish a certain dependence of the rectifying properties of semi-conductors on their degree of irradiation by ions of alkali metals. Results of the study are presented. One reference (1950). Table; graph; diagrams.

Institution : Laboratory of Semi-Conductors of the Acad. of Scs. of the USSR

Presented by : Academician A. F. Ioffe, June 14, 1954

MOZHAROVA, Ye.N.; RUSANOV, A.M.; KOMAROVA, R.S.

Use of batyl alcohol and leukogen in radiation leucopenia. Med.  
rad. no.9:13-16 '61. (MIRA 15:1)

1. Iz Tsentral'nogo nauchno-issledovatel'skogo instituta medi-  
tsinskoy radiologii Ministerstva zdoravookhraneniya SSSR.  
(RADIATION SICKNESS) (LEUCOPENIA) (BATYL ALCOHOL)  
(THIAZOLIDINECARBOXYLIC ACID)

40627

27.3500  
27.2400

S/241/62/007/002/003/004  
1015/1215

AUTHORS: Rusanov, A. M., Mozharova, Ye. N., and Komarova, R. S.

TITLE: Chemicals employed in therapy of hemopoietic disorders due to ionizing radiation

PERIODICAL: Meditsinskaya radiologiya, v. 7, no. 2, 1962, 42-48

TEXT: The various drugs which have been tried for treating radiation leucopenia are not effective enough. This article deals with the results of experimental and clinical study of the therapeutic effect of leukogen (2-(alpha-phenyl-alpha-carbethoxymethyl)-thiazolidine-4-carbonic acid) and batylol (alpha-octodecyl-glycerol ether-called batyl alcohol) in whole body and local irradiation. Experiments were carried out on 425 female guinea pigs weighing 300-400 g. The animals were subjected to a whole-body irradiation of 300 r at a dose rate of 23-25 r/min from a PYM-3 (RUM-3) apparatus. Leukogen and batylol were administered orally or injected i.m. in doses of 0.1-50.0 mg/kg b.w. Hematologic examinations of peripheral blood and bone marrow were performed before and after irradiation. The leucopoietic effect of leukogen was greater than that of batylol in the healthy control animals but the therapeutic effect of batylol was greater than that of leukogen in the irradiated animals. Batylol not only increased hemopoiesis but also brought about a lighter course of radiation sickness. The clinical trial of these chemicals was tried on 67 patients who developed leucopenia

Card 1/2

RUSANOV, A. M.; MOZHAROVA, Ye. N.; KOMAROVA, R. S.

Chemical substances in the treatment of disorders of hemopoiesis  
arising during the action of ionizing radiation. Med. rad. no.2:  
42-49 '62. (MIRA 15:7)

(HEMOPOIETIC SYSTEM—RADIOGRAPHY)  
(CHEMOTHERAPY)

PETROV, A.D. [deceased]; CHEL'TSOVA, M.A.; KOMAROVA, S.D.

Reaction of organolithium compounds of p-bromobiphenyl and p-bromo  
(chloro) diphenylmethane with dimethyldichlorosilane and germane.  
Izv. AN SSSR. Ser. khim. no.3:550-552 '65. (MIRA 18:5)

1. Institut organicheskoy khimii im. N.D.Zelinskogo AN SSSR.



SLAVCHENKO, N.A.[deceased]; KOMAROVA, S.G., red.

[Power tools in construction] Elektroinstrument v  
stroitel'stve; spravochnoe posobie. Kiev, Budivel'.  
nik, 1965. 1965. 170 p. (MIRA 18:12)

VASILENKO, Anatoliy Ivanovich; KOMAROVA, S.G., red.

[Small sewage purification structures] Malye ochistnye  
kanalizatsionnye sooruzheniia. Kiev, Izd-vo "Budivel'nyk,"  
1964. 99 p. (MIRA 17:11)

NOZDRACHEV, Nikolay Denisovich; DUBODELOV, Vladimir Anatol'yevich;  
MIROSHNIKOV, Yakov Ivanovich; KOMAROVA, S.G., red.

[Wages in construction] Oplata truda v stroitel'stve. Kiev,  
Budivel'nyk, 1965. 148 p. (MIRA 18:5)

RATUSHNYY, G.D.; KOMAROVA, S.N.; LYGINA, N.I.; POGREBYNYAK, E.G.

Application of ion exchange for the acidification of fruit and  
berry juices. Trudy KIPP no.22:371-374 '61. (MIRA 16:4)  
(Fruit juices) (Ion exchange)

KOMAROVA, T.A.

Painting of machine tools. Stan. i instr. 24 no.5:20-23 My '53.

(MIRA 6:6)

(Machine tools)

TROFIMOV, N.P.; ARMP'YEVA, S.A.; KOMAROVA, T.A.; LITVINENKO, T.G.; SEMOV, V.A.; SKOSYRNEVA, N.A.; SHOHERBAKOV, N.P.; FEDOROV, P.I., *otv.red.*; SAYTANIDI, L.D., *tekhn.red.*

[Wages on state farms; a collection of materials on wages and work norms for state farms] Oplata truda v sovkhozakh; sbornik materialov po opplate truda i normam vyrabotki v sovkhozakh. Moskva, Izd-vo M-va sel'.khoz.RSFSR, 1960. 380 p. (MIRA 13:5)

1. Russia (1917- R.S.F.S.R.) Ministerstvo sel'skogo khozyaystva, Upravleniye organizatsii truda i sarabotnoy platy. 2. Upravleniye organizatsii truda i sarabotnoy platy Ministerstva sel'skogo khozyaystva (for all except Fedorov, Saytanidi).  
(Wages) (State farms)

KOMAROVA, T., ekonomist

Wages of motortruck drivers. Sel'.mekh. no.3:24-25 '62. (MIRA 15:3)  
1. Upravleniye organizatsii i oplaty truda Ministerstva sovkhozov  
RSFSR.  
(Truck drivers) (Wages)

KOMAROVA, T.A.

Vladimir Ivanovich Vernadskii. Vest. Mosk. un. Ser. 2: Khim. 18  
no.3:3-4 My-Je '63. (MIRA 16:6)

(Vernadskii, Vladimir Ivanovich, 1863-1945)



USSR/Chemistry - Physical chemistry

Card 1/1 : Pub. 147 - 16/21

Authors : Figurovskiy, N. A., and Komarova, T. A.

Title : Investigation of the crystallization kinetics of salts from supersaturated solutions. Part 1.- The kinetics of growth of single crystals

Periodical : Zhur. fiz. khim. 8, 1479-1488, Aug 1954

Abstract : The kinetics of the growth of single  $KAl(SO_4)_2 \cdot 12H_2O$  and  $CuSO_4 \cdot 5H_2O$  crystals were investigated under conditions of constant reducing supersaturation. A certain parabolical dependence existing between the rate of salt crystallization and the relative supersaturation is described. It was established that the role of individual parameters, which determine the rate of crystallization, can be determined only in conditions when the effect of other factors is either eliminated or accurately defined. Nine references: 7-USSR and 2-German (1907-1950). Tables; graphs.

Institution : The M. V. Lomonosov State University, Moscow

Submitted : January 1, 1954

USSR/Engineering - Protective coating

Card 1/1 Pub. 103 - 10/24

Authors : Komarova, T. A.

Title : Improvement in the quality of paints for machines

Periodical : Stan. i instr. 11, 23-28, Nov 1954

Abstract : The standard qualities of paints, used in the coating of metallurgical machines for the purpose of protecting these machines against the effects of corrosion, are listed. The two basic principles governing the quality of a paint, used in machine construction industry, are explained. The technological process of applying paints to metal surfaces is described. The method of applying paint coatings to surfaces of non-ferrous metals is discussed. Tables; drawings.

Institution : ...

Submitted : ...

КОМАРОВА, Т. А.

USSR.

62  
/ Kinetics of crystallization of salts from supersaturated solutions. I. Kinetics of growth of single crystals. N. A. Pigurowskii and T. A. Komarova (M. V. Lomonosov State Univ., Moscow). *Zhur. Fiz. Khim.* 28, 1479-83 (1964); cf. *F., Sedimentometricheskii Analiz*, Moscow: Acad. Sci. U.S.S.R. 1948. — The rates of crystal growth from their supersatd. solns. of  $KAl(SO_4)_2 \cdot 12H_2O$  (I) and  $CuSO_4 \cdot 5H_2O$  (II) were detd. The initial wt. (P) of crystal (c.), relative supersatn. of soln. (s), rate of increase of c. wt. ( $\Delta P$ ) in g. per min. per sq. cm. of calcd. c. surface (S), and the coeffs.  $B_0$ ,  $B_1$ , and  $B_2$  in the equation  $\Delta P = B_0 + B_1 s + B_2 s^2$ , by which the increase of c. wt. in a given time (t) can be calcd., are tabulated for initial c. wts. from 0.0433 to 0.8344 g. for I and from 1.3600 to 3.1608 g. for II.  $\Delta P$  is also plotted with respect to t. Values of  $\Delta P_i/S \Delta t$  for I and II can be calcd. from the equations  $10^4 \Delta P_i/S \Delta t = 0.100 + 1.025x + 2.67x^2$  and  $10^4 \Delta P_i/S \Delta t = 0.0300 + 0.532x + 15.0x^2$ , resp., where  $\Delta P_i$  is the increase of c. wt. in the interval  $\Delta t$ . It is suggested that the crystn. of I and II is a 2nd-order process described by the equation  $\Delta P_i/S \Delta t = kx^2$ , where k is 0.0055 for I and 0.010 for II. Values of  $B_0$ ,  $B_1$ , and  $B_2$  are given for I under conditions of decreasing supersatn. For these conditions the equation for the rate of c. growth is  $10^4 \Delta P_i/S \Delta t = 0.386 + 0.00524x + 1.37x^2$ .  
J. W. L., Jr.

USSR/Chemistry - Crystallization

Card 1/1 Pub. 147 - 10/25

Authors : Komarova, T. A., and Figurovskiy, N. A.

Title : The kinetics of salt crystallization from supersaturated solutions. Part 2. Crystallization of salts in conditions of decreasing supersaturation.

Periodical : Zhur. fiz. khim. 28/10, 1774-1781, Oct 1954

Abstract : The crystallization of  $KAl(SO_4)_2 \cdot 12H_2O$ ,  $KCl$ ,  $KJ$ ,  $K_2SO_4$ ,  $NH_4Cl$ ,  $Na_2CO_3 \cdot 10H_2O$ ,  $Pb(NO_3)_2$ ,  $Na_2S_2O_3 \cdot 10H_2O$ ,  $CuSO_4 \cdot 5H_2O$  was investigated under conditions of decreasing supersaturation and it was established that the crystallization process has an autocatalytic nature. The changes in the average rate of crystallization depend not only upon the properties of the salt but also upon the nature of supersaturation. It was found that the volume from which separation of the substance takes place increases with the reduction in supersaturation. The existence of a critical supersaturation value was observed when the rate of salt crystallization equalled zero. Eight references: 5-USSR and 3-German (1892-1948). Table; graphs.

Institution : The M. V. Lomonosov State University, Moscow

Submitted : January 20, 1954

Komarkova, T.A.

"APPROVED FOR RELEASE: 06/13/2000

CIA-RDP86-00513R000824110009-6

APPROVED FOR RELEASE: 06/13/2000

CIA-RDP86-00513R000824110009-6

5(4)

SOV/78-4-3-6/34

AUTHORS: Figurovskiy, N. A., Komarova, T. A.

TITLE: On the Mechanism of the Crystallization Process (O mekhanizme protsessy kristallizatsii)

PERIODICAL: Zhurnal neorganicheskoy khimii, 1959, Vol 4, Nr 3, pp 522-529 (USSR)

ABSTRACT: The growth of crystals is considered a free radical process in view of the chain mechanism and the crystallization process. The active centers where the growth of crystals occurs are on a higher energy level than the other parts of the crystal surface. The separation of the solid phase from the solution begins at the active centers and is accompanied by the destruction of active centers and the simultaneous development of new ones. The growth process of potassium chloride is outlined as follows: The growth of the KCl crystals is due to  $(Kr)K^+$  active centers on the surface of the crystals. In supersaturated solutions associations of the hydrated molecules, such as  $KCl(H_2O)_n$ , exist.

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These associations react with active centers on the crystal surface to form free ions, which crystallize out, and to form

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On the Mechanism of the Crystallization Process

free water molecules. The process whereby the crystalline nuclei are formed is considered a formation of complex atoms or ions having active centers. The occurrence of the active centers on the formation of the complex associations initiates the crystal growth process. The first stage of the process cannot be visually detected. The self-accelerating crystal growth ensues only when the branched chains are formed. New active centers can form on the surface during growth. Active centers are mainly formed at the corners and edges and at the disturbance centers of the crystals. In the case of a higher supersaturation owing to a spontaneous formation of additional active centers in the crystallization system, the crystallization process is extremely fast. The kinetics of the crystallization of KCl from solutions at different states of supersaturation has been investigated and the kinetic curves have been recorded. The curves are S-shaped. The rate of crystallization depends on the nature of the salt, the state of supersaturation, the temperature, the impurities and other factors. The rate of crystallization, considered as a chain reaction, is determined by the number of chains formed at a given moment and by the variation of the number of chains with time. The crystallization curves are

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## On the Mechanism of the Crystallization Process

similar in appearance to the autocatalytic process. Experimental data show that the S-shape of the crystallization curve is typical of easily soluble substances. A deviation from the S-shape occurs in the case of relatively slightly or relatively highly supersaturated solutions. The influence of impurities is discussed with regard to the chain mechanism of crystallization. Some typical features distinguish the crystallization process from other chain reactions. The difference between the chain mechanism of crystallization and other homogeneous chain reactions has been discussed. The influence of the crystallization vessels on the kinetics is shown with the crystallization of  $\text{Na}_2\text{CO}_3 \cdot 10\text{H}_2\text{O}$ . An investigation of the kinetics of the crystallization rate of  $\text{Na}_2\text{CO}_3 \cdot 10\text{H}_2\text{O}$  in horizontal tubes having different diameters showed that an increase in the tube diameter of the crystallization vessel results in an increase in the rate. The crystallization rate is expressed by the temperature coefficient  $K_T$ :

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On the Mechanism of the Crystallization Process

$$K_T = \frac{1}{V_T} \cdot \frac{V_{(T+10)} - V_T}{(T+10) - T}$$

wherein  $V_{(T+10)}$  and  $V_T$  are the crystallization rates at temperatures  $T+10$  and  $T$ . The coefficient  $K_T$  increases with an increase in temperature. The chain mechanism of crystallization has been confirmed by numerous experiments. There are 4 figures and 35 references, 27 of which are Soviet.

ASSOCIATION: Moskovskiy gosudarstvennyy universitet im. M. V. Lomonosova, Khimicheskiy fakul'tet (Moscow State University imeni M. V. Lomonosov, Department of Chemistry)

SUBMITTED: May 7, 1958

Card 4/4

S/076/60/034/008/027/039/XX  
B015/B063

AUTHORS: Figurovskiy, N. A., Komarova, T. A., and Roman'kov, Yu. I.

TITLE: Effect of Temperature on the Crystallization of Calcium Salts From Solutions 27

PERIODICAL: Zhurnal fizicheskoy khimii, 1960, Vol. 34, No. 8,  
pp. 1826 - 1832

TEXT: As the precipitation of easily filterable substances is of great importance for practical analysis, the effect of various factors upon crystallization is frequently studied. The authors have now studied the effect of temperature upon the rate of crystallization of  $\text{KClO}_3$ ,  $\text{KBrO}_3$ ,  $\text{KIO}_3$ ,  $\text{KNO}_3$ ,  $\text{K}_2\text{SO}_4$ , and  $\text{KCl}$ . The supersaturated solutions were prepared by V. M. Fisher's method (Ref.7), and crystallization was studied in a thermostat between  $0^\circ$  and  $40^\circ\text{C}$ . The maximum rate of crystallization  $v$  was graphically determined from the kinetic curves. In all salts it was found that  $v$  increases with temperature and with the supersaturation of the solutions, but is not always greater for those potassium salts which have

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Effect of Temperature on the Crystallization  
of Calcium Salts From Solutions

S/076/60/034/008/027/039/XX  
B015/B063

a better solubility. The increase in  $v$  is attributed to an increase in the interaction among ions with an increase in concentration and a decrease of the interaction among water molecules and between salt ions and water molecules. At  $0^{\circ}\text{C}$ , e.g.,  $\text{KBrO}_3$  and  $\text{KClO}_3$  have a similar solubility, while the corresponding values for  $v$  differ largely.  $\text{KCl}$  and  $\text{KNO}_3$  have the highest values of  $v$ .  $\text{K}_2\text{SO}_4$  occupies a special position since  $v$  is practically independent of the supersaturation at  $0^{\circ}\text{C}$ . Besides,  $v$  increases only slightly at a certain relative value of supersaturation between  $0^{\circ}$  and  $40^{\circ}\text{C}$ , whereas it increases considerably in this range at two other relative values of supersaturation. The salts may be divided into three groups:  $\text{K}_2\text{SO}_4$  and  $\text{KCl}$  exhibit the greatest change of  $v$  between  $0^{\circ}$  and  $20^{\circ}\text{C}$ ;  $\text{KClO}_3$  and  $\text{KBrO}_3$  show a linear increase of  $v$  with temperature; and  $\text{KNO}_3$  and  $\text{KIO}_3$  show a great increase of  $v$  between  $20^{\circ}$  and  $40^{\circ}\text{C}$ . The temperature gradient  $k$  of crystallization which is given as  $1/v_i \cdot v_{i+1} - v_i / (T_i + 10) - T_i$  (1) ( $v_i$  and  $v_{i+1}$  = maximum crystallization

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Effect of Temperature on the Crystallization  
of Calcium Salts From Solutions

S/076/60/034/008/027/039/XX  
B015/B063

rates at  $T_1$  and  $T_1 + 10$ , respectively), drops with a rise of temperature and increases with supersaturation (cf. Table 2). Between  $0^\circ$  and  $20^\circ\text{C}$ , the drop is more distinct than between  $20^\circ$  and  $40^\circ\text{C}$ . With a rise of temperature, the effect of the type of anion on  $k$  is lowered the more the smaller is supersaturation. There are 6 figures, 2 tables, and 22 references: 15 Soviet, 4 Indian, 2 US, and 1 German.

ASSOCIATION: Moskovskiy gosudarstvennyy universitet im. M. V. Lomonosova  
(Moscow State University imeni M. V. Lomonosov)

SUBMITTED: November 27, 1958

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BQ15/B063

Т а б л и ц а 2

Изменение температурного градиента скоростей кристаллизации солей  
при различных пересыщениях

t, °C	1 Температурный градиент k [по формуле (1)] в обратных градусах			t, °C	1 Температурный градиент k [по формуле (1)] в обратных градусах		
	2 относительное пересыщение				2 относительное пересыщение		
	x <sub>0</sub> = 0,05	x <sub>0</sub> = 0,10	x <sub>0</sub> = 0,15		x <sub>0</sub> = 0,05	x <sub>0</sub> = 0,10	x <sub>0</sub> = 0,15
<b>KClO<sub>3</sub></b>							
10—0	0,041	0,080	0,082	10—0	0,047	0,052	0,050
20—10	0,029	0,039	0,040	20—10	0,048	0,036	0,041
30—20	0,022	0,027	0,028	30—20	0,042	0,032	0,040
40—30	0,018	0,021	0,021	40—30	0,030	0,033	0,035
<b>KBrO<sub>3</sub></b>							
10—0	0,094	0,108	0,100	10—0	0,0084	0,070	0,150
20—10	0,048	0,051	0,062	20—10	0,0079	0,038	0,032
30—20	0,031	0,034	0,039	30—20	0,0072	0,020	0,018
40—30	0,024	0,025	0,028	40—30	0,0067	0,011	0,011
<b>KNO<sub>3</sub></b>							
10—0	0,041	0,080	0,082	10—0	0,0084	0,070	0,150
20—10	0,029	0,039	0,040	20—10	0,0079	0,038	0,032
30—20	0,022	0,027	0,028	30—20	0,0072	0,020	0,018
40—30	0,018	0,021	0,021	40—30	0,0067	0,011	0,011
<b>K<sub>2</sub>SO<sub>4</sub></b>							
10—0	0,094	0,108	0,100	10—0	0,0084	0,070	0,150
20—10	0,048	0,051	0,062	20—10	0,0079	0,038	0,032
30—20	0,031	0,034	0,039	30—20	0,0072	0,020	0,018
40—30	0,024	0,025	0,028	40—30	0,0067	0,011	0,011

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KJO <sub>3</sub>				KCl			
10-0	0,046	0,038	0,016	10-0	0,068	0,025	0,035
20-10	0,030	0,056	0,033	20-10	0,021	0,010	—
30-20	0,024	0,055	0,052				
40-30	0,019	0,044	0,052				

Text to Table 2: Variation of the Temperature Gradient of the Crystallization Rate of Salts With Varying Supersaturation; 1 - Temperature gradient  $k$  (expressed in reciprocal temperature values according to formula (1)); 2 - Relative supersaturation ( $x_0 = c_x - c_0/c_0$ , where  $c_x$  and  $c_0$  denote salt concentration and solubility, respectively, at the given temperature)

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AUTHORS: Gerasimov, Ya. I., and Komarova, T. A.

TITLE: Nikolay Aleksandrovich Figurovskiy (On his 60th birthday)

PERIODICAL: Zhurnal fizicheskoy khimii, v. 36, no. 3, 1962, 666 - 668

TEXT: N. A. Figurovskiy, Doctor of Chemical Sciences, Professor, completed his studies at the vtoraya kostromskaya sovetskaya shkola (Second Kostroma Soviet School) in 1919, and worked at the RKI until 1920. He has been a Communist since 1921. From 1920 to 1927, he served in the Red Army where he taught chemistry for the commanding staff of the RKKA in Kostroma in 1922, and in Ivanovo-Voznesensk in 1923. He studied at Nizhegorod University in 1925, taught chemistry at the schools of higher education in Nizhniy-Novgorod (now Gor'kiy) from 1926, and co-directed the Chemical Division of the mentioned University. In 1934, he defended in Gor'kiy his candidate's dissertation "Kapillyarnyye svoystva aktivnykh ugley" ("Capillary properties of activated carbon"), and in 1940 his doctor's dissertation "Sedimentometricheskii analiz i yego primeneniye" ("Sedimentation analysis and its application") at the Kolloidno-elektro-khimicheskii institut AN SSSR (Colloid-electrochemical Institute AS USSR).  
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Nikolay Aleksandrovich Figurovskiy...

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in Moscow. He volunteered at the front in 1941, became a reservist in 1944, and worked in the group of the Upolnomochenny Goskomitet Oborony (Authorized State Committee on Defense). In 1945 - 47, he headed the Glavnoye upravleniye universitetov (Main Administration of Universities), then became Deputy Director at the Institut istorii yestestvoznaniya AN SSSR (Institute of History of Natural Sciences AS USSR) and, after re-organization, at the Institut istorii yestestvoznaniye i tekhniki (Institute of History of Natural Sciences and Technology), in 1956 he became Director of this Institute. From 1945, he was a professor at the Chemical Division of the Moskovskiy gosudarstvennyy universitet (Moscow State University), and a consultant to the Tsentral'nyy nauchno-issledovatel'skiy aptechnyy institut (Central Pharmaceutical Scientific Research Institute). Two thirds of his papers deal with the history of natural sciences, especially of chemistry (papers on M. V. Lomonosov, T. Ye. Lovits, D. I. Mendeleev, N. D. Zelinskiy, N. N. Zinin, A. P. Borodin, A. I. Khodnev, L. N. Shishkov, G. I. Gess, P. P. Orlov, A. A. Voskresenskiy, and others). His physicochemical papers deal with (1) the development of dispersion analysis and the extension of its field of application, (2) the crystallization and formation of new phases, and (3) the application of physicochemical analysis. He is an active co-worker of the Commission of

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Nikolay Aleksandrovich Figurovskiy...

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the AS USSR, and a number of international commissions for the organization of scientific conferences. He is chairman of the metodicheskiy sovet po khimii Vsesoyuznogo obshchestva po rasprostraneniyu nauchnykh i politicheskikh znaniy (Council of Chemical Methods of the All-Union Community for the Propagation of Scientific and Political Knowledge), and a member of the Presidium of this institution. He is a member of several foreign scientific institutions. N. A. Figurovskiy has been awarded several military decorations. There is 1 figure.

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KOMAROVA, T.A.

On the occasion of a new admission to the Chemical Faculty  
of Moscow University. Khim. v shkole 17 no.3:90-94 My-Je '62.  
(Moscow University—Admission) (MIRA 15:6)

(Chemistry—Study and teaching)

FOMIN, A.P.; OVCHINNIKOV, F.M.; KOROVIN, M.A.; MAKURIN, N.D.; KOMAROVA, T.A.; SMIRNOVA, V.A.; ZELENETSKAYA, L.V., red.; SAYTANIDI, L.D., tekhn. red.

[Wages on state farms and other state agricultural enterprises; basic regulations and instructions on wages] Oplata truda v sovkhozakh i drugih gosudarstvennykh predpriyatiyakh; sbornik osnovnykh polozhenii i ukazanii po oplate truda. Moskva, Izd-vo MSKh RSFSR, 1962. 483 p. (MIRA 16:2)

1. Russia (1917- R.S.F.S.R.) Upravleniye organizatsii truda i zarabotnoy platy. 2. Upravleniye organizatsii truda i zarabotnoy platy Ministerstva proizvodstva i zagotovki sel'skokhozyaystvennykh produktov RSFSR (for all except Zelenetskaya, Saytanidi).

(Agricultural wages)